

MORE NEW NAMES AND COMBINATIONS IN SCROPHULARIACEAE-MANULEAE

O. M. HILLIARD

ABSTRACT. Seventeen species of *Manulea* are newly described and one subspecies is raised to species level. *Phyllopodium haurii* (*Polycarena haurii*) is transferred to *Selago*, while *Polycarena capillaris*, which is synonymous with *P. parvula*, is transferred to *Phyllopodium*, and *Selago cordata* is transferred to *Phyllopodium*.

This paper is a continuation of that published in *Notes RBG Edinb.* 46: 49-52, and deals mainly with undescribed species of *Manulea*. Full descriptions will follow in the revision of Scrophulariaceae-Manuleae now in preparation.

In the Latin descriptions, the term *pilus sphaerocephalus* refers to a particular type of hair that I have called in English balloon-tipped. These hairs are commonplace in *Manulea*, and I have not yet found them in any other genus.

Manulea acutiloba Hilliard, **species nova** *M. silenoidei* Benth. affinis, sed pedicellis brevioribus (plerumque ad 6mm longis, nec 5-25mm longis), calycis lobis plerumque angustioribus (lobis anticis 0.4-0.5mm latis, nec 0.4-1mm) pilis fere ad margines restrictis (nec dorso omnino piloso); corollae lobis apicibus altius et acutius divisus, fortasse semper albis (nec azureis vel pallide violaceis), filamentis posticis interdum glabris (nec semper dense barbatis). Type: Cape, Namaqualand, 2917 DB, Springbok, 25 viii 1941, *Esterhuysen* 5880 (holo. BOL-specimens marked A).

Probably endemic to Namaqualand.

Manulea adenocalyx Hilliard, **species nova** *M. corymbosae* Linn. f. affinis sed praecipue calycis lobis longioribus (lobis anticis 4.3-9.5mm nec 3.8-4.5(-5.5) mm), lobis omnibus basi minus sacculatis quam in *M. corymbosa*, dorso omnino dense glanduloso-puberulis (nec, glandulis minutis exceptis, glabris), marginibus pilis longis eglandulosis absentibus vel paucis (nec marginibus dense barbatis) differt.

Type: Cape, Piquetberg div., 3218 DB, Piquenierskloof, 700ft, 6 viii 1897, *Schlechter* 10750 (holo. E, iso. BOL).

Ranges from Modderfontein near Wupperthal south and west to the environs of Clanwilliam, Citrusdal, Het Kruis and Karroo Poort.

Manulea adenodes Hilliard, **species nova** a *M. cheirantho* (L.) L. caulibus inflorescentiis et foliis glandulosissimis (nec glanduloso-puberulis tantum prope basin caulis, pilis glandulosis et sphaerocephalis in foliis intermixtis), pilis sphaerocephalis pro maxima parte in axibus inflorescentiae in pedicellis et in calycibus dispositis cum cellula terminali dimidio minore quam in *M. cheirantho* distinguitur.

Type: Cape, Clanwilliam div., 3219 AA, N Cedarberg, Pakhuis, 17 x 1954, *Esterhuysen* 23760 (holo. BOL).

Known only from Pakhuis.

Manulea aridicola Hilliard, *species nova* a *M. pusilla* Benth. inflorescentia thyrsioidea et demum paniculata (nec simpliciter racemosa) et corollae tubo plerumque brevior (2.4–3mm, nec 2.8–4mm), et stigmatibus floris maturi brevior (0.6–1mm, nec 1–1.7mm) distinguenda. A *M. decipiente* Hilliard calycis lobis saepissime brevioribus (2–2.5mm, nec 2.5–4.5mm), corollae tubo brevior (2.4–3mm, nec 3.5–4.5mm) et limbo minore (5–8.5mm trans lobos laterales, nec 9–15mm) differt.

Type: Cape, Richtersveld, 2816 BD, halfway up Numees peak, W of S entrance Helskloof, 27 ix 1981, *Hugo* 2821 (holo. STE, iso. PRE).

Known from several localities in the Richtersveld and one record from southernmost Namibia, at Obib.

Manulea caledonica Hilliard, *species nova* *M. tomentosae* (L.) L. affinis sed indumento e pilis sphaerocephalis alteris glandulosis intermixtis (nec e pilis acutis, glandulosis intermixtis raris), foliis plerumque angustioribus raro plus quam 5mm latis (nec raro minus quam 5mm latis), inflorescentiis laxioribus floribus inferioribus saepe solitariis (nec in cymulis) et cymulis plus minusve monochasialibus (nec dichasialibus) differt.

Type: Cape, Caledon div., 3419 CD, west of Franskraal, \pm 75ft, 9 iv 1979, *Hugo* 1699 (holo. STE, iso. PRE).

Confined to the coastal areas of Caledon, Bredasdorp and Riversdale divisions, from Hermanus to Still Bay.

Manulea chrysantha Hilliard, *species nova* *M. fragrantis* Schlechter affinis sed statim distinguenda pilis conspicuis sphaerocephalis in caulibus pedicellis calycibus pagina corollae exteriore (nec glanduloso-puberulis), corollae lobis vivide luteis (nec albis nec ochraceis nec malvinis nec azureis).

Type: Cape, 3224 AC, Aberdeen, 4 v 1935, *L. E. Taylor* 451 (holo. BOL).

Widespread in the Karroo, from the Gamka river east to Pearston.

Manulea decipiens Hilliard, *species nova* a *M. cheirantho* (L.) L. axibus inflorescentiae plerumque aphyllis bracteis minutissimis (raro foliaceis ut plerumque in *M. cheirantho*), foliis minus profunde dentatis, pilis glandulosis prope basin caulium brevioribus (ad 0.25mm, nec 0.3–0.4mm), pilis sphaerocephalis cellula apicali dimidio minus quam in *M. cheirantho* (c. 0.05mm versus 0.1mm vel majore), filamentis posticis glabris (nec barbatis) distinguitur.

Type: Cape, Van Rhynsdorp div., 3118 CD, \pm 10 miles E of Doringbaai, farm Kliphoeck, 300ft, 29 viii 1970, *Hall* 3795 (holo. STE, iso. PRE).

Ranges from northern Namaqualand to Verloren Vlei and Clanwilliam.

Manulea deserticola Hilliard, *species nova* a *M. fragrantis* Schlechter caule, inflorescentiae axi, calyce, corolla pilis sphaerocephalis indutis (nec minute glanduloso-puberulis), caule et inflorescentia interdum glabrescentibus, corollae lobis lanceolatis (nec oblongis) et majoribus (lobis posticis 4–4.8 \times 0.7–1mm, nec 1.75–3.5 \times 0.8–1.6mm) limbum distincte bilabiatum (nec fere regularem) formantibus distinguenda. A *M. gariepina* Benth. pilis sphaerocephalis praesentibus (nec deficientibus), calycis lobis longioribus

(2.2–2.9mm, nec 1.2–2mm), corollae tubo saepe brevior (4.5–5.2mm, nec 5–7mm), stylo saepe brevior (0.2–0.6mm, nec 0.6–1.2mm) recedit.

Type: Orange Free State, Fauresmith distr., 2925 AD, Koksfontein, 24 ix 1935, *Pont* 2816 (holo. PRE).

Known from the south-western Orange Free State and neighbouring parts of the Cape.

Manulea diandra Hilliard, *species nova* a *M. fragrans* Schlechter et *M. chrysanth* Hilliard staminibus saepe 2 tantum (nec 4), anticis (si adstentibus) vel ad staminodia redacta vel antheris minimis (0.1mm, nec 0.2–0.4mm longis) differt. A *M. fragrans* etiam distinguenda caulibus et foliis persistenter glanduloso-puberulis (nec glabrescentibus), inflorescentia subcapitata (nec fructificante valide elongata) calycis lobis omnino glanduloso-puberulis (nec ad margines tantum), limbo corollae luteo (nec albo nec pallide ochraceo vel malvino vel azureo). A *M. chrysanth* etiam differt pilis sphaerocephalis a caule calyce corolla absentibus.

Type: Cape, Sutherland div., 2 miles S of Sutherland, 6 ix 1968, *Hall* 3278 (holo. NBG, iso. STE).

Known principally from the Roggeveld, but also recorded from the Nieuweveld Mountains.

Manulea exigua Hilliard, *species nova* a *M. cheiranth* (L.) L. corollae limbo albo (nec flavo vel aurantiaco) et plerumque minore (3.5–6.5mm trans lobos laterales, nec 5–16mm), lobis lateralibus angulo recto patentibus (nec acute ascendentibus), lobis omnibus oblongo-ellipticis vel breviter lanceolatis apice acuto vel obtuso marginibus planis (nec longe lanceolatis subulatis marginibus revolutis) distinguitur. A *M. minore* Diels caulibus distanter foliatis, bracteis foliaceis (nec caule scaposo, bracteis minimis), foliis profundius dentatis et lobatis, axi inflorescentiae pedicellis calyce corolla omnibus pilis conspicuis sphaerocephalis praeditis (nec pro maxima parte glanduloso-puberulis), corollae lobis plerumque angustioribus (usque ad 1.75mm latis, nec 1.3–2.2mm) recedit.

Type: Cape, Caledon div., Mossel river shore, 24 ix 1952, *Compton* 23617 (holo. NBG, iso. STE).

Recorded from Caledon division, from about Cape Hangklip to Gansbaai and inland to Houwhoek.

Manulea flanaganii Hilliard, *species nova* a *M. parviflora* Benth. habitu annuo (caule multiramoso e radice palari tenui, nec in parte inferiore simplici e radice dauciformi), pilis caulibus calycisque pro maxima parte glanduloso-puberulis (nec pilis pro maxima parte sphaerocephalis), calycis lobis plerumque longioribus (c. 2.5–3.3mm, nec 1–2.8mm) et omnino glanduloso-puberulis (nec pilis sphaerocephalis ad margines fere restrictis), antheris anticis longioribus (0.5–0.6mm, nec 0.2–0.4mm) distinguitur.

Type: Orange Free State, 3025 BD, near Bethulie, Orange river, 4000ft, xii 1892, *Flanagan* 1505 (holo. SAM, iso. BOL).

Known only from the type collection.

Manulea gariesiana Hilliard, *species nova* a *M. silenoidei* Benth. pilis caulium brevioribus (usque ad 0.1mm, nec 0.15–0.3mm), pedicellis plerumque brevioribus (raro plus quam 9mm, nec plerumque minimum 10mm), pilis calycis pro maxima parte ad margines loborum restrictis usque ad 0.1–0.3mm longis glandulosis (nec calyce omnino pubescente pilis glandulosis et sphaerocephalis intermixtis usque ad 0.2–0.5mm longis), et corollae limbo saepe minore (5.5–7mm, nec 6–12mm) albo (nec azureo vel malvino) differt. Type: Cape, Namaqualand, 3018 CC, 35km before Garies on way north, 4 ix 1986, *Batten* 739A (holo. E).

Apparently confined to Namaqualand, with many records between Garies and Bitterfontein.

Manulea linearifolia Hilliard, *species nova* a *M. cephalotei* Thunb. caulibus foliisque glabris (nec dense pubescentibus pilis eglandulosis et glandulosis intermixtis, glandulosis demum scabridis), foliis linearibus crassis integris usque ad 12–22 × 1–1.5mm (nec oblongis vel oblanceolatis tenuibus dentatis usque ad 25–60 × 4–10mm) distinguenda.

Type: Cape, Ceres div., between Bokkeveld Sneeuwkop and Winkelhaaks River, 'Zuurvlakte', 20 iv 1946, *Esterhuysen* 12704 (holo. BOL).

Known from a few sites in the mountains stretching from the southern end of the Cold Bokkeveld mountains to the Karadouws Mountains east of Worcester.

Manulea minuscula Hilliard, *species nova* a *M. pusilla* Benth. indumento sparso et dissimili (pro maxima parte glandulis sessilibus lucentibus praecipue in foliis calyce et dorsis loborum corollae dispositis, nec pro maxima parte pilis sphaerocephalis in caulibus pedicellis calyce et pagina exteriori corollae), calycis lobis distincte spatulatis (nec lanceolato-oblongis acutis) distinguenda.

Type: Namibia, Fläche östl. der Buchuberge, 2 vii 1929, *Dinter* 6445 (holo. E; iso. BOL, SAM, Z).

Recorded from south-western Namibia and the northern part of Namaqualand.

Manulea namibensis (Roessler) Hilliard, *comb. et stat. nov.*

Type: Namibia, Aus, an der Strasse nach Luderitzbucht, *Merxmüller & Giess* 2936 (holo. M, n.v.).

Syn.: *M. gariepina* subsp. *namibensis* Roessler in *Mitt. Bot. München* 6: 14 (1966).

Manulea praeterita Hilliard, *species nova* a *M. silenoidei* Benth. pilis caulium et foliorum brevioribus (ad 0.1mm longis, nec 0.2–0.5mm), pilis calycis ad 0.1mm longis et ad margines loborum fere restrictis (nec ad 0.2–0.5mm longis et bene dispersis), corollae tubo glabro vel fere glabro (nec pilis ad 0.15mm longis praedito) distinguitur. A *M. gariesiana* Hilliard floribus pro maxima parte in cymulas 2–7-floras thyrsus formantes dispositis (nec pro maxima parte solitariis racemosis), bracteis 1.5–4mm longis (nec plerumque plus quam 6mm longis et interdum foliaceis), calycis lobis 1.4–2.5mm longis (nec 2.3–3.8 mm).

Type: Cape, Clanwilliam div., 3218 BB, 1 mile N of Clanwilliam, 23 viii 1966, *Barker* 10445 (holo. NBG).

Recorded from the environs of Nieuwoudtville and Van Rhynsdorp south to Clanwilliam.

Manulea psilostoma Hilliard, *species nova* ab affinibus *M. adenocalyce* Hilliard et *M. corymbosa* L. f. thyrso conspicuo 20–40mm diam. (nec floribus racemosis) differt.

Type: Cape, Clanwilliam div., 3218 BA, Graafwater, 20 vii 1941, *Esterhuysen* 5606 (holo. BOL).

Known only from Graafwater.

Manulea tenella Hilliard, *species nova* a *M. gariepina* Benth. racemis simplicibus gracillimis caulibus fructiferis minus quam 1mm diam. (nec inflorescentiis paniculatis caulibus 1.2–1.5mm diam.), pilis glandulosis longioribus, eis caulium et calycis usque ad 0.2mm, eis folii ad 0.25–0.3mm (nec minus quam 0.1mm), bracteis oblongo-lanceolatis, infimis 1.5–2.5 × 0.6–1mm (nec ovatis 1–2.2 × 1–2mm) differt.

Type: Namibia, Windhoek div., 2318 AB, Gameros, xii 1912, *Dinter* 2677 (holo. SAM).

An ill-known species, recorded near Gobabis in Namibia and between Keetmanshoop and Rietfontein.

Phyllopodium capillare (L. f.) Hilliard, *comb. nov.*

Type: C.B.S., sheet no. 14347 in herb. *Thunberg* (UPS), lectotype, chosen here.

Syn.: *Manulea capillaris* L.f., Suppl. 285 (1782).

Polycarena capillaris (L.f.) Benth. in Hook., Comp. Bot. Mag. 1: 372 (1836).

P. parvula Schltr. in Bot. Jahrb. 27: 181 (1899). Type: Cape, Clanwilliam div., in sandy places near Zuurfontein, 150ft, *Schlechter* 8534 (holo. B†; iso. BOL, E, K.).

Phyllopodium cordatum (Thunb.) Hilliard, *comb. nov.*

Type: C.B.S., sheet no. 13877 in herb. *Thunberg* (UPS).

Syn.: *Selago cordata* Thunb., Prodr. 100 (1800) et Fl. Cap. ed. Schultes 464 (1823).

Selago baurii (Hiern) Hilliard, *comb. nov.*

Type: Transkei, Baziya Mountain, 3500ft, xi, *Baur* 808 (holo. K).

Syn.: *Phyllopodium baurii* Hiern in Thiselton-Dyer, Fl. Cap. 4(2): 320 (1904).

Polycarena baurii (Hiern) Levyns in J. S. Afr. Bot. 5: 37 (1939).

Baur's specimen is a twig bearing at its tip but a single flower together with a calyx from which the corolla has fallen, and I am reluctant to remove either for dissection; the flower that Hiern dissected is in a capsule attached to the sheet, but the gynoecium is missing. However, I had the good fortune to collect the plant on Baziya Mountain in February 1981 (as *Hilliard & Burt* 13883, E, K, NU, S), and the specimen matches Baur's so precisely that it is clear Hiern was mistaken in describing the ovules as 'several': there is one pendulous ovule in each locus.

The plant is a twiggy perennial herb about a metre tall, and it is common in the scrub at the upper limit of the forest behind the Forestry Station. In February, the bushes were going into fruit, with each twig terminating in a many-flowered raceme, but a couple of new shoots each bore only one flower and therefore closely resemble the twig collected by Baur, in November, which is probably the beginning of the flowering season.

ACKNOWLEDGEMENTS

It is my pleasure, as always, to thank the directors of those herbaria who have either sent their material on loan or given me access to their collections, and Mr B. L. Burtt for translating the diagnoses into Latin.